

09/707,413

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AMENDMENTSIn the Claims:

1. (Currently Amended) A system for cooling coated semiconductor substrates, said system comprising:
  - a chamber ~~adapted to receive~~ for receiving at least one coated semiconductor substrate;
  - a coupling coupled to the chamber and a fluid reservoir for placing the chamber in fluid communication with a the fluid reservoir;
  - an inlet valve attached to the coupling for controlling a flow of cooling fluid between the fluid reservoir and the chamber, wherein the pressure drop across the inlet valve is at least about 10 bar; and
  - a controller coupled to the inlet valve for controlling the inlet valve.
2. (Cancelled)
3. (Original) The system of claim 2 wherein the pressure drop across the inlet valve is at least about 100 bar.
4. (Currently Amended) The system of claim 1 wherein the controller controls the temperature of the cooling fluid at a point within the chamber.
5. (Currently Amended) The system of claim 1 further comprising an outlet valve for controlling the a flow of cooling fluid out of the chamber, wherein the controller also controls the outlet valve.
6. (Currently Amended) The system of claim 5 wherein the controller controls the rate of cooling fluid flow through the chamber.

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7. (Currently Amended) The system of claim 1 wherein the cooling fluid entering the chamber from the reservoir substantially mixes with fluid already in the chamber before contacting the substrates at least one semiconductor substrate.

8. (Currently Amended) The system of claim 7 further comprising a baffle, wherein the cooling fluid flowing into the chamber is directed against the baffle.

9-20. (Withdrawn)

21. (Cancelled)